

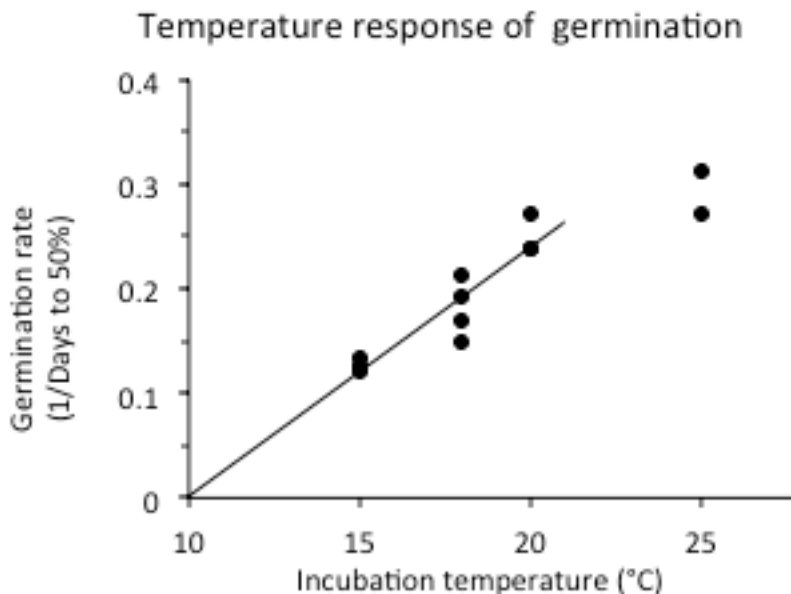
The temperature response of buckwheat germination

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In trying to determine the earliest suitable planting date, and potentially developing a degree-day model for buckwheat growth, we needed to assess the effect of temperature on buckwheat germination. Our observation had been that germination in late May can take longer than weed germination, resulting in weed problems.

Buckwheat seeds were placed in lots of 100 on germination paper, rolled and put into incubators at various temperatures. Three or four rolls were prepared for each germination temperature. Germination was assessed daily and the days to 50% germination determined. The percent germination on the day before reaching 50% and the day after reaching 50% was used to calculate fractional days.

At temperatures below 20°C the germination rate (inverse of germination time) declined linearly with an intercept of 10°C. In our experience weeds get a head start if the buckwheat takes longer than four or five days to terminate. Buckwheat germinated that quickly only at 18°C or higher.



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